REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Claims 1-7, 9-18, 2-32 and 34-41 were pending. Claims 1-7, 9-18, 2-32 and 34-41 were rejected.

Claims 1, 12, 23, 26, and 41 have been amended. No claims have been cancelled. No claims have been added. Support for the amendments is found in the specification, the drawings, and in the claims as originally filed. Applicants submit that the amendments do not add new matter.

REJECTIONS UNDER 35 U.S.C. § 112

The Examiner has rejected claim 41 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Applicants have amended claim 41 to overcome the Examiner rejection.

It is respectfully submitted that amended claim 41 is now patentable under 35 U.S.C. § 112, first paragraph.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-3, 5-7, 9-14, 16-18, 20-28, 30-32, 34-38 and 40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,282,556 to Chehrazi, et al. ("Chehrazi") in view of U.S. Patent No. 6,036,350 to Mennemeir, et al. ("Mennemeir").

Applicants have amended claim 1 to include receiving a first vector of numbers and a second vector of numbers; and selecting a first plurality of numbers from the first vector and a second plurality of numbers from the second vector, as described in the Specification (see, for example, paragraph [00225], p. 75, Figure 32)

Chehrazi discloses a sum of absolute differences instruction (SABD) (col. 20, lines 42- col. 21, line 12, Figures 20A and 20B). More specifically, Chehrazi discloses that SABD operation computes the differences between corresponding operands stored in the operand registers, Vt and Vs (col. 20, lines 47-50). In particular, Chehrazi discloses that SABD instruction specifies the source or input registers Vt and Vs (col. 20, lines 56-58, Figure 20A), in contrast to selecting a first plurality of numbers from the first vector and a second plurality of numbers from the second vector, as recited in amended claim 1.

Mennemeir discloses calculating absolute differences for each pair of corresponding values of maxima and minima operands using four instructions (Figure 3, col. 5, line 9- col. 8, line 24).

It is respectfully submitted that Chehrazi does not teach or suggest a combination with Mennemeir, and Mennemeir does not teach or suggest a combination with Chehrazi. Chehrazi teaches a sum of absolute differences instruction, Mennemeir, in contrast, teaches using four instructions to calculate absolute differences for each pair of corresponding values of maxima and minima. It would be impermissible hindsight based on Applicants own disclosure to combine Chehrazi and Mennemeir.

Furthermore, even if Chehrazi and Mennemeir were combined, such a combination would lack the following limitations of amended claim 1: selecting a first plurality of numbers from the first vector and a second plurality of numbers from the second vector.

Therefore, Applicants respectfully submit that amended claim 1 is not obvious U.S.C. § 103(a) over Chehrazi, in view of Mennemeir.

Because amended claims 12, 23, and 26 include related limitations, Applicants respectfully submit that amended claims 12, 23, and 26 are not obvious U.S.C. § 103(a) over Chehrazi, in view of Mennemeir.

Given that claims 2-3, 5-7, 9-11, 13-14, 16-18, 20-22, 24-25, 27-28, 30-32, 34-48, and 40 depend from amended claims 1, 12, 23, and 26 respectively, and add additional limitations, Applicants respectfully submit that amended claims 2-3, 5-7, 9-11, 13-14, 16-18, 20-22, 24-25, 27-28, 30-32, 34-48, and 40 are not obvious U.S.C. § 103(a) over Chehrazi, in view of Mennemeir.

Claims 4, 15, 29 and 39 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Chehrazi in view of Mennemeir as applied to claims 1, 2, 12, 26 and 27 above, and further in view of EPO 0485776A2 to Diefendorff, et al. ("Deifendorff").

Diefendorf discloses executing graphics pixel packing instructions in a data processor. More specifically, Diefendorf discloses truncating fixed point values to a predetermined number of bits.

It is respectfully submitted that Chehrazi does not teach or suggest a combination with Mennemeir and Diefendorf, Mennemeir does not teach or suggest a combination with Chehrazi and Diefendorf, and Diefendorf does not teach or suggest a combination with Chehrazi and Mennemeir. Chehrazi teaches a sum of absolute differences instruction, Mennemeir, in contrast, teaches using four instructions to calculate absolute differences for each pair of corresponding values of maxima and minima. Diefendorf, in contrast, teaches packing pixels of data. It would be impermissible hindsight based on Applicants own disclosure to combine Chehrazi, Mennemeir, and Diefendorf.

Furthermore, even if Chehrazi, Mennemeir, and Diefendorf were combined, such a combination would lack the following limitations of amended claim 1: selecting a first plurality of numbers from the first vector and a second plurality of numbers from the second vector.

Therefore, Applicants respectfully submit that amended claim 1 is not obvious U.S.C. § 103(a) over Chehrazi, in view of Mennemeir, and further in view of Diefendorf.

Because amended claims 12, 23, and 26 contain related limitations, Applicants respectfully submit that amended claims 12, 23, and 26 are not obvious U.S.C. § 103(a) over Chehrazi, in view of Mennemeir, and further in view of Diefendorf.

Given that claims 4, 15, 29, and 39 depend from amended claims 1, 12, 23, and 26 respectively, and add additional limitations, Applicants respectfully submit that amended claims 4, 15, 29, and 39 are not obvious U.S.C. § 103(a) over Chehrazi, in view of Mennemeir, and further in view of Diefendorf.
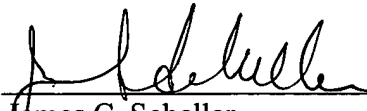
CONCLUSION

It is respectfully submitted that in view of the amendments and arguments set forth herein, the applicable rejections and objections have been overcome. If there are any additional charges, please charge Deposit Account No. 02-2666 for any fee deficiency that may be due.

Respectfully submitted,

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